

**GEO Health Community of Practice (CoP)**  
**Telecon: Focus on COVID-19 Transmission**  
June 23, 2020

**In Attendance:** 43 participants

John Haynes (NASA HQ), Juli Trtanj (NOAA), Helena Chapman (NASA HQ/BAH), Sue Estes (U. of Alabama in Huntsville), John Balbus (NIEHS), Ann Liu (NIEHS), Trisha Castranio (NIEHS), Stan Benjamin (NOAA), Amanda Quintana (USGCRP), Krista Hoevermeyer (USGCRP), Lillian Cooke (NASA HQ), Jonathan O'Brien (NASA ARSET), Anna Borovikov (NASA GMAO/SSAI), Cynthia Hall (NASA Earth Science Data Systems), Brady Helms (NASA Disasters), Sean McCartney (NASA Goddard), Assaf Anyamba (USRA/NASA Goddard), Dorian Janney (NASA Goddard/GPM), Helen Amos (NASA Goddard/SSAI), Sushel Unninayar (NASA Goddard/GESTAR/MSU), Ray Kiess (USAF, 14th Weather Squadron), Bryan Richards (USGS National Wildlife Health Center), Lisa Conti (Florida Department of Agriculture), Prakhar Misra (Research Institute of Humanity and Nature, U. of Tokyo), Shannon Vattikuti (Mississippi State U; Natural Resonance Technologies), Ben Zaitchik (Johns Hopkins U.), Josh Colston (U. of Virginia), Rowena Christiansen (U. of Melbourne Medical School, Australia), Antoine Flahault (Institute of Global Health, Faculty of Medicine, U. of Geneva), Christine Choirat (Swiss Data Science Center), Celine Audette (Environment and Climate Change Canada), Melissa MacDonald (Environment and Climate Change, Canada), Serge Olivier Kotchi (Public Health Agency of Canada), Ian Coady (UK Department for International Development), Ado Muhammad (Centre of Health Systems Research and Development/Ahmadu Bello U., Nigeria), Iphigenia Keramitsoglou (National Observatory of Athens), Fernando Belda (National Meteorological Service, Spain), Adrián Guzmán González (Mexican Space Agency), Jorge Cabrera Hidalgo (Central American Integration System), Orlando Reyes (Central American Integration System), David Rodriguez (Council of Health Ministers in Central America, SE-COMISCA/SICA), Mark Urban (RedCLARA), Kawa Shinbun.

**Summary Notes:**

*\*Prepared by Helena Chapman (NASA HQ/BAH) and Helen Amos (NASA Goddard/SSAI)*

**John Haynes (NASA HQ)** and **Juli Trtanj (NOAA)** opened the telecon by welcoming all participants. They invited GEO members to provide brief updates on upcoming conferences and related activities.

**John Haynes (NASA HQ)** mentioned that the [GEO Virtual Symposium](#) was a successful event with over 1,500 registered participants over the five-day event. He thanked the presenters in the GEO Health Community of Practice's [Earth Observations for COVID-19 Response and Recovery](#), which was held on June 15, 2020. Next, he mentioned that NASA, ESA, and JAXA will launch the data dashboard on environmental and socioeconomic indicators related to COVID-19 transmission ("one-stop-shop" for end-users) on June 25, 2020, and shared the respective NASA web feature, [NASA, Partner Space Agencies to Release Global View of COVID-19 Impacts](#). Next, he shared the profile ([Gathering On-the-Ground Data with Tatiana Loboda](#)) of Tatiana Loboda (U. of Maryland, College Park), who serves as one of the researchers

for the GEO EO4HEALTH Initiative. Finally, he requested that CoP members provide brief testimonials (e.g. paragraph) to Helena Chapman ([helena.chapman@nasa.gov](mailto:helena.chapman@nasa.gov)) about how the GEO Health CoP has helped them network and advance their research, especially during the COVID-19 pandemic. He said that we would like to showcase some of these success stories during this global challenge.

**Juli Trtanj (NOAA)** mentioned that the *WMO/WHO Climatological, Meteorological, and Environmental Factors in the COVID-19 Pandemic: An International Virtual Symposium on Drivers, Predictability, and Actionable Information*, aims to leverage global expertise through keynote presentations, scientific panels, and group discussions. Event coordinators include **Ben Zaitchik (Johns Hopkins U.)**, **Joy Shumake-Guillemot (WMO/WHO)**, **Juli Trtanj (NOAA)**, and **Neville Sweijd (COVID-19 Environmental Reference Group, South Africa)**. This event will be held from August 4-6, 2020, with a half-day schedule for three days. Next, she said that the Global Heat Health Information Network (GHHIN) will be offering the [Heat Health Masterclass Series 2020](#) in June and July 2020. The next virtual classes will be held from 11:00-12:30PM EDT (GMT-4) on June 30 (*Economic Valuation of Heat-health Impacts and Interventions*) and July 21 (*Developing an Effective Heat Health Action Plan (HHAP) for your city*).

**John Haynes (NASA HQ)** provided the link for the Interagency COVID-19 Meeting, led and moderated by **David Green (NASA HQ)** of the NASA Disaster Program, which would follow the GEO Health CoP telecon, at 11AM EDT (GMT-4).

**Adrián Guzmán González (Mexican Space Agency)** provided an overview on three telemedicine projects related to COVID-19 activities by the Mexican Space Agency: telemedicine services, GIS-WEB platform of epidemic simulation, and ventilator development. He also described collaborative meetings to establish projects related to COVID-19 response efforts with space agencies in India, Argentina, Europe, Italy, France, and Japan.

**Jorge Cabrera Hidalgo (Central American Integration System)** provided an overview on the activities of the [Central American Integration System](#) (Sistema de la Integración Centroamericana, SICA), which is comprised of eight countries (Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama, Dominican Republic). First, he mentioned that the Central American presidents met in March 2020 to establish a contingency plan for COVID-19 response efforts, discussing impacts on health, disaster management, economics, security, and migration. Then, he described some collaborative meetings with other agencies including space-based agencies (e.g. NASA, ESA, JAXA) and international organizations (e.g. World Bank/[Understanding Risk for Central America](#)). He emphasized that strong coordination at different levels under GEO Initiatives is key to strengthen capabilities at local, national, and international levels.

**Fernando Belda (National Meteorological Service, Spain)** agreed that the GEO Initiatives provide opportunities where members can work together. Since the COVID-19 pandemic is a multidisciplinary challenge, he recommended that CoP members organize meetings where scientific talks and group discussions can showcase regional and international activities related to COVID-19 transmission and other important health topics. **Fernando Belda (National Meteorological Service, Spain)** and **Jorge Cabrera Hidalgo (Central American Integration System)** mentioned that they would coordinate a teleconference to discuss potential collaborations with SICA, the Regional Committee of Hydraulic Resources ([Comité Regional de Recursos Hidráulicos](#), CRRH), the Coordination Center for the Prevention of Natural Disasters in Central America ([Centro de Coordinación para la Prevención de los Desastres en América Central y República Dominicana](#), CEPREDENAC), and the Conference of Directors of National Meteorological and Hydrological Iberoamerican Services ([Conferencia de Directores de los Servicios Meteorológicos e Hidrológicos Iberoamericanos](#), CIMHET).

**Ado Muhammad (Centre of Health Systems Research and Development/Ahmadu Bello U., Nigeria)** provided an overview on the [Centre of Health Systems Research and Development](#), as a coordination body that draws from research expertise within the region and around the globe. He stated that their principal theme is the role of ecology and environment and health (“planetary health”). He shared that one current objective was to examine the surge in mortality rates (February-May 2020) in northern Nigeria based on various factors: effects of the lockdown measures versus the role of COVID-19 transmission (although limited testing), heat and dehydration, complications of underlying illnesses (e.g. diabetes), and acute hunger. He stated that their findings can help stakeholders to consider regional differences in intervention measures and policy. He mentioned that they would require Earth observation data related to heat and humidity.

**Juli Trtanj (NOAA)** mentioned that heat waves continue to be a challenge. **Ado Muhammad (Centre of Health Systems Research and Development/Ahmadu Bello U., Nigeria)** stated that the Ministry of Health conducted some research, but they did not examine whether climatic factors contributed to the surge in mortality rates. He also stated that increased temperatures are related to surge in meningitis cases (dissemination via droplets), and similarities to COVID-19 transmission may be explored.

**Antoine Flahault (Institute of Global Health, Faculty of Medicine, U. of Geneva)** and **Christine Choirat (Swiss Data Science Center)** provided an overview on a collaborative dashboard that delivers [daily COVID-19 epidemic forecasting](#) with eight-day predictions of COVID-19 incidence and mortality. This dashboard provides COVID-19 risk maps on 209 countries and territories and uses data from the European CDC and Johns Hopkins U. They stated that this dashboard is a collaborative effort between the U. of Geneva’s Institute of Global Health and ETH Zurich-EPFL’s Swiss Data Science Center. The [Renku](#) open access platform offers collaborative data science, where data, code, and software tools are version-controlled and linked by a knowledge graph.

**Ben Zaitchik (Johns Hopkins U.)** mentioned that the *WMO/WHO Climatological, Meteorological, and Environmental Factors in the COVID-19 Pandemic: An International Virtual Symposium on Drivers, Predictability, and Actionable Information* has received sponsorship from the GEO Health CoP and the American Geophysical Union. He stated that they are awaiting the final revision by the WMO and plan to disseminate the official webpage and call for abstracts soon.

**John Haynes (NASA HQ)** and **Juli Trtanj (NOAA)** thanked all presenters for their insightful presentations, continued contributions to the field, and engagement in the group discussion. They agreed that this telecon had provided an opportunity to share information, connect researchers, and leverage resources that can amplify current activities related to the COVID-19 response. They also requested that GEO Health CoP members share the CoP telecon schedule with their colleagues.

**John Haynes (NASA HQ)** and **Juli Trtanj (NOAA)** closed the telecon and mentioned that the next telecon would be scheduled for Tuesday, June 30<sup>th</sup> at 8:30AM EDT (GMT-4). The focus area would be determined later this week.

Adjourned: 10:00 AM EDT (GMT-4)